

Claims

What is claimed is:

1. A low cross talk electrical signal transmission assembly having a signal

5 transmission medium and further comprising:

a first signal pair having a first conductor and a second conductor;

a second signal pair having a third conductor and a fourth conductor;

a first input signal having the first conductor attached thereto;

a second input signal having the second conductor attached thereto;

10 a third input signal having the third conductor attached thereto;

a fourth input signal having the fourth conductor attached thereto;

a first compensation line attached to the first input signal; and

a second compensation line attached to the third input signal and

intertwined with the first compensation line to create a first compensation line assembly

15 having capacitive and inductive coupling.

2. The low cross talk electrical signal transmission assembly of claim 1, wherein the first conductor and the third conductor are ring conductors and the second conductor and the fourth conductor are tip conductors.

20 3. The low cross talk electrical signal transmission assembly of claim 1, wherein the first conductor and the third conductor are tip conductors and the second conductor and the fourth conductor are ring conductors.

4. The low cross talk electrical signal transmission assembly of claim 1, wherein the signal transmission medium is a circuit board.

5. A method of reducing cross talk between two pairs of conductors extending from a first connector and across a substrate to a second connector, the method comprising:

arranging selected ones of the conductors on the substrate adjacent to each other for coupling their respective electrical signals to each other and;

connecting at least one pair of mutually insulated intertwined conductors to one end of a pair of selected ones of the conductors extending across the substrate, the mutually intertwined conductors having a connected end being in electrical contact with the selected ones of the conductors and a free end opposite the connected end, the free end being unattached to the substrate.

6. The method of claim 5 further comprising the step of arranging the selected ones of the conductors on two opposing sides of the substrate adjacent to each other for coupling their respective electrical signals to each other.

7. The method of claim 6 further comprising the step of arranging two pairs of the mutually insulated intertwined conductors opposite each other on the opposing sides of the substrate.

8. The method of claim 6 wherein the selected ones of the conductors on the two opposing sides are arranged to be parallel to each other for coupling their respective electrical signals between the two opposing sides.